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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,678	11/27/2001	Satoshi Hanada	Q67285	7280

7590 05/10/2004  
SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, NW  
Washington, DC 20037-3213

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/993,678

Applicant(s)

HANADA ET AL. 

Examiner

Victor S Chang

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 4/2/2004. Applicants' amendments to claim 3 and newly added claims 5-7 have all been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn.

***Response to Amendment***

4. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US 5116881) in view of WO 94/07930, newly cited as evidence of the state of the art, substantially for the reasons set forth in section 6 of Paper No. 120203, together with the following additional observations.

It is noted that newly added claims 5-7 are de facto duplicates of cancelled claims 1, 2 and 4, respectively.

With respect to Applicants' argument that "Park does not teach laminating a foam sheet with another object, i.e., a substrate." (Remarks, page 6, first full paragraph), the Examiner notes that the subject matter "laminating a foam sheet with another object" is neither recited in independent claim 3, nor in newly added independent claim 5 and its dependent claims 6 and 7. Applicants' argument is irrelevant.

For newly added claim 6, the Examiner repeats (see Paper No. 6, page 3) that although Park lacks an express teaching about the suitable blend ratio of the carboxylic acid modified polyolefin containing adhesive layer, it is believed that the art of tie layer is old and well known, and blending suitable amount of carboxylic acid modified polyolefin with unmodified polyolefin is conventional. Note also as evidence of the state of the art Chou et al. (US 4990562) which teaches that suitable adhesive resins for a multilayer sheet structure include polyolefins modified (or grafted) with maleic anhydride, etc., and blends of these polymers with polyolefins (column 6, line 55 to column 7, line 19). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to modify Park's tie layer with a suitable blend of polyolefin and carboxylic acid modified polyolefin, motivated by the desire to obtain a strong adhesion to between laminated layers, as taught by Park.

For newly added claims 5 and 7, the Examiner repeats (see Paper No. 6, page 3) that although Park is silent about the infrared property of the laminate, it is noted that the prior art combination anticipates the composition of the non-foamed layer of claims 5 and 7, and its inherent infrared property in claim 5 is also believed to be anticipated by the prior art combination. It should be noted that Park discloses an additional element (functional layer) not claimed in the instant invention is irrelevant.

With respect to Applicants' response arguing that "the prior art does not teach or suggest foamed polyolefin sheet comprising a non-foamed surface layer comprising the claimed spectrally-characterized thermoplastic resin composition." (Remarks, page 6,

bottom paragraph), the Examiner repeats that Park's invention teaches the invention as claimed, as set forth above, Applicants' argument to the contrary notwithstanding.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL ZIRKER  
PRIMARY EXAMINER  
GROUP ~~1900~~  
1700

*Daniel Zinker*